



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/044,807

DATE: 01/30/2002 TIME: 15:44:46

Input Set : A:\LEX-0298-USA SEQLIST.txt
Output Set: N:\CRF3\01302002\J044807.raw

ENTERED

4 <110> APPLICANT: Yu, Xuanchuan Turner, C. Alexander Jr. 7 <120> TITLE OF INVENTION: Novel Human Protease and Polynucleotides Encoding the Same 9 <130> FILE REFERENCE: LEX-0298-USA C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/044,807 C--> 11 <141> CURRENT FILING DATE: 2002-01-11 11 <150> PRIOR APPLICATION NUMBER: US 60/261,684 12 <151> PRIOR FILING DATE: 2001-01-12 14 <160> NUMBER OF SEQ ID NOS: 2 16 <170> SOFTWARE: FastSEQ for Windows Version 4.0 18 <210> SEQ ID NO: 1 19 <211> LENGTH: 5289 20 <212> TYPE: DNA 21 <213> ORGANISM: homo sapiens 23 <400> SEQUENCE: 1 60 24 atggaatget geegteggge aacteetgge acaetgetee tetttetgge titeetgete 120 25 ctgagttcca ggaccgcacg ctccgaggag gaccgggacg gcctatggga tgcctggggc 26 ccatggagtg aatgctcacg cacctgcggg ggtggggcct cctactctct gaggcgctgc 180 27 ctgagcagca agagctgtga aggaagaaat atccgataca gaacatgcag taatgtggac 240 28 tgcccaccag aagcaggtga tttccgagct cagcaatgct cagctcataa tgatgtcaag 300 360 29 caccatggcc agttttatga atggcttcct gtgtctaatg accctgacaa cccatgttca 30 ctcaagtgcc aagccaaagg aacaaccctg gttgttgaac tagcacctaa ggtcttagat 420 31 ggtacgcgtt gctatacaga atctttggat atgtgcatca gtggtttatg ccaaattgtt 480 32 ggctgcgatc accagctggg aagcaccgtc aaggaagata actgtggggt ctgcaacgga 540 33 gatgggtcca cctgccggct ggtccgaggg cagtataaat cccagctctc cgcaaccaaa 600 34 toggatgata otgtggttgo aattooctat ggaagtagao atattogoot tgtottaaaa 660 720 35 ggtcctgatc acttatatct ggaaaccaaa accctccagg ggactaaagg tgaaaacagt 780 36 ctcageteca caggaacttt eettgtggae aattetagtg tggaetteca gaaattteca 840 37 gacaaagaga tactgagaat ggctggacca ctcacagcag atttcattgt caagattcgt 38 aacteggget eegetgacag tacagtecag tteatettet ateaacceat catecacega 900 39 tggagggaga cggatttett teettgetea geaacetgtg gaggaggtta teagetgaea 960 40 teggetgagt getacgatet gaggageaac egtgtggttg etgaceaata etgteaetat 1020 41 tacccagaga acatcaaacc caaacccaag cttcaggagt gcaacttgga tccttgtcca. 1080 42 gccagtgacg gatacaagca gatcatgcct tatgacctct accatcccct tcctcggtgg 1140 43 gaggecacce catggacege gtgeteetee tegtgtgggg ggggeateea gageegggea 1200 44 gtttcctgtg tggaggagga catccagggg catgtcactt cagtggaaga gtggaaatgc 1260 45 atgtacaccc ctaagatgcc catcgcgcag ccctgcaaca tttttgactg ccctaaatgg 1320 46 ctggcacagg agtggtctcc gtgcacagtg acatgtggcc agggcctcag ataccgtgtg 1380 47 gtcctctqca tcgaccatcg aggaatgcac acaggaggct gtagcccaaa aacaaagccc 1440 48 cacataaaaq aggaatgcat cgtacccact ccctgctata aacccaaaga gaaacttcca 1500

49 gtcgaggcca agttgccatg gttcaaacaa gctcaagagc tagaagaagg agctgctgtg

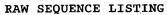
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51 gggacccagg tgcgaatagt caggtgccag gtgctcctgt ctttctctca gtccgtggct

1560

1620

1680



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52	gacctgccta	ttgacgagtg	tgaagggccc	aagccagcat	cccagcgtgc	ctgttatgca	1740
			tcctgagttc				1800
54	ggcctgcagg	atttcgacga	gctgtatgac	tgggagtatg	aggggttcac	caagtgctcc	1860
55	gagtcctgtg	gaggaggtgt	ccaggaggct	gtggtgagct	gcttgaacaa	acagactcgg	1920
56	gagcctgctg	aggagaacct	gtgcgtgacc	agccgccggc	ccccacagct	cctgaagtcc	1980
57	tgcaatttgg	atccctgccc	agcaaggtgg	gaaattggca	agtggagtcc	atgtagtctc	2040
			gaccagagac				2100
			ggctgatgag				2160
60	caagcttgta	accgctttaa	ttgcccccca	gcctggtacc	ctgcacagtg	gcagccgtgt	2220
			tgttcagaaa				2280
62	gatggcagct	tcctggagct	tcctgagacc	ttctgttcag	cttcaaaacc	tgcctgccag	2340
63	caagcatgca	agaaagatga	ctgtcccagc	gagtggcttc	tctcagactg	gacagagtgt	2400
64	tccacaagct	gcggggaagg	cacccagact	cgaagcgcca	tttgccgaaa	gatgctgaaa	2460
65	accggcctct	caacggttgt	caattccacc	ctgtgcccgc	ccctgccttt	ctcttcctcc	2520
66	atcaggccct	gtatgctggc	aacctgtgca	aggcccgggc	ggccatccac	gaagcacagc	2580
67	ccgcacatcg	cggccgccag	gaaggtctac	atccagactc	gcaggcagag	gaagctgcac	2640
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69	gcgcgcaggg	tccgcaagcc	cctcatcacc	tgggagaagg	acggccagca	cctcatcagc	2760
70	tcgacgcacg	tcacggtggc	ccccttcggc	tatctcaaga	tccaccgcct	caagccctcg	2820
			ctcagcgggc				2880
			cgtggcccgg				2940
			cccgaaggag				3000
74	atcttctcca	acggcagcaa	ggcggagaag	cggggcctgg	ccgccaaccc	ggggagccgc	3060
75	tacgacgacc	tcgtctcccg	gctgctggag	cagggcggct	ggcccggaga	gctgctggcc	3120
76	tcgtgggagg	cgcaggactc	cgcggaaagg	aacacgacct	cggaggagga	cccgggtgca	3180
77	gagcaagtgc	tcctgcacct	gcccttcacc	atggtgaccg	agcagcggcg	cctggacgac	3240
78	atcctgggga	acctctccca	gcagcccgag	gagctgcgcg	acctctacag	caagcacctg	3300
			gatcttccgc				3360
80	aagccctcgg	agcgcaggac	ttccccagtg	actctctcgc	ctcataaaca	cgtgtctggc	3420
			ctcctccacc				3480
			gcgcaagatc				3540
			gacggtggcc				3600
			cccaaggcct				3660
			tcttctacag				3720
			ctacacttgc				3780
			agcaggaaag				3840
			agtcacagtc				3900
			ctgccaggtt				3960
90			gggctccccg				4020
. 91			tcagggcctg				4080
92	gagctgactg	agagcaccca	gctgctgatc	ctagatcccc	cccaagtccc	cacacagttg	4140
			cgctgccact				4200
			cctggatcct				4260
			tatcacctgg				4320
			cttggcagct				4380
			cagctgcctt				4440
			agattactgg				4500
			ggttcagcag				4560
100) gaggtcaacc	c ctgcccactg	g cgcagggaag	g gttegeeetg	g cggtgcagco	c categegtge	4620

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101	aaco	eggag	gag a	actgo	ccctt	c to	ggtg	ggato	gt	jacct	tcct	ggto	ctgc	ctg 1	tacco	ggagc	4680
102	tgt	gggg	gag g	gtgto	caga	ac co	egcag	gggt	gaco	etgto	caaa	agct	gaaa	agc o	ctct	ggatc	4740
103	tcca	accc	etg t	tgtc	caato	ja ca	atgt	gcaco	cag	gtc	gcca	agc	ggcct	tgt 🤉	ggaca	acccag	4800
104	gcct	tgtaa	acc a	agcag	gctgt	g to	gtgga	igtg	ged	cttct	cca	gct	gggg	cca ç	gtgca	aatggg	4860
105	cctt	tgcat	cg o	gcct	caco	ct ag	gctgt	gcaa	a cad	cagao	caag	tctt	ctg	cca q	gacad	egggat	4920
																cagaac	
																acagct	
108	acct	tatac	gca a	actac	egget	tt co	agto	cccg	gegt	gtg	gagt	gtgt	gcat	tgc (cegea	accaac	5100
109	aaqq	rcagt	cqc (ctgad	gcaco	ct qt	gcto	ctg	ggg	ccc	egge	ctg	ccaa	ctg g	gcago	cgctgc	5160
110	aaca	atca	ecc (catq	gaaa	aa ca	atqqa	agtgo	aga	qaca	acca	cca	ggtad	ctg d	cgaga	aggtg	5220
																gtggc	
	aaaa	_	-		5		•							,,,			5289
				ON C	: 2												
				H: 17													
	<212																
					homo	sar	niens	3									
				NCE:		Juc	7 1 0 11 1	•									
						Arα	Δla	Thr	Pro	Glv	Thr	Leu	Leu	Leu	Phe	Leu	•
123	1	OLU	Cys	.Cy5	77.5	*** 9	1114			10					15		
		Dho	LAII	T.All	T.AII	Ser	Sor	Δτα	Thr		Arα	Ser	Glu	Glu	Asp	Ara	
125	Ата	FILE	цец	20	пец	DCI	DCI	1119	25		9	001	O_u	30		5	
	λαν	C111	T OIL		λan	λla	Trn	G1v		Ψrn	Ser	Glu	Cvs		Arg	Thr	
	ASP	СТУ	35	пъ	пор	AIG	115	40	110	115	JCI	OIU	45	001	2129		
127	Crro	C1		C117	λ 1 a	Cor	Плл		Lau	λνα	λνα	Cve		Sar	Ser	T.vg	
	Cys	_	СТУ	GTÄ	Ата	Ser	55	261	пеп	лгу	лгу	60	пси	Der	DCI	Lys	
129		50	c1	C1	7 ~~	7 an		7 ~~	mar.x.	λ×α	Пhr		Sor	λen	Val	λen	
		Cys	GIU	СТА	Arg		TTE	ALG	1 y 1	MIY	75	Cys	Ser	ASII	Val	80 80	
131		D	D	a 1	71.	70	3 ~~	Dho	λ m.a.	٦ 1 م		Cln	Cvra	Cor	Ala		
	Cys	Pro	PLO	GIU		GTA	ASP	PIIe	Arg	90	GIII	GIII	Суз	261	95	1112	
133	•:		**- 1	T	85	TT - ~	<i>α</i> 1	61 m	Dho		C1	m ~~	Tou	Dro		cor	
	ASI	ASP	val		HIS	HIS	СТУ	GTII		тут	GIU	ırb	пеп	110	Val	Ser	
135	•		D	100	3	D	0	· Com	105	T ***	Cvra	Cln	λ 1 ¬		Clyr	Thr	
	ASI	ASP		ASP	ASII	PIO	Cys		ьец	пур	Cys	GIII	125	пуз	Gly	1111	
137	1	_	115	** . 1	a 1	-	.1-	120	,	17a 1	T	7 ~~		mh m	7 ~~	Crra	
	Thr		vaı	vaı	GIU	Leu		Pro	гаг	vaı	ьeu	140	СТУ	THE	Arg	Cys	
139	_	130			_	_	135		-1 -	a	01		G	a1 -	T1.	370]	
		Thr	GLu _.	Ser	Leu		мет	Cys	тте	ser		Leu	Cys	GIII	Ile		
	145					150		_	1		155	~ 3	_	_	~ ·	160	
	Gly	Cys	Asp	His		Leu	Gly	Ser	Thr		Lys	Glu	Asp	Asn	Cys	GTA	
143					165	_			_	170	_		_		175	_	
		_	Asn			Gly	Ser	Thr		Arg	Leu	Val	Arg		Gln	Tyr	
	•			180					185				_	190	_	_	
	Lys	Ser		Leu	Ser	Ala	Thr	Lys	Ser	Asp	Asp	Thr		Val	Ala	Ile	
147			195					200					205				
148	Pro	Tyr	Gly	Ser	Arg	His		Arg	Leu	Val	Leu		Gly	Pro	Asp	His	
149		210					215					220					
		Tyr	Leu	Glu	Thr		Thr	Leu	Gln			Lys	Gly	Glu	Asn		
	225					230					235		*			240	
152	Leu	Ser	Ser	Thr	Gly	Thr	Phe	Leu	Val		Asn	Ser	Ser	Val	Asp	Phe	
153					245					250					255		

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154 155	Gln	Lys	Phe	Pro 260	Asp	Lys	Glu	Ile	Leu 265	Arg	Met	Ala	Gly	Pro 270	Leu	Thr
	Ala	Asp	Phe 275	Ile	Val	Lys	Ile	Arg 280	Asn	Ser	Gly	Ser	Ala 285	Asp	Ser	Thr
	Val	Gln 290	Phe	Ile	Phe	Tyr	Gln 295	Pro	Ile	Ile	His	Arg 300	Trp	Arg	Glu	Thr
160	Asp 305		Phe	Pro	Суѕ	Ser 310		Thr	Cys	Gly	Gly 315	Gly	Tyr	Gln	Leu	Thr 320
		Ala		Cys	Tyr 325	Asp	Leu	Arg	Ser	Asn 330	Arg	Val	Val	Ala	Asp 335	Gln
164 165	Tyr	Cys	His	Tyr 340	Tyr	Pro	Glu	Asn	Ile 345	Lys	Pro	Lys	Pro	Lys 350	Leu	Gln
166 167	Glu	Cys	Asn 355	Leu	Asp	Pro	Cys	Pro 360	Ala	Ser	Asp	Gly	Tyr 365	Lys	Gln	Ile
168 169	Met	Pro 370	Tyr	Asp	Leu	Tyr	His 375	Pro	Leu	Pro	Arg	Trp 380	Glu	Ala	Thr	Pro
	Trp 385	Thr	Ala	Cys	Ser	Ser 390	Ser	Cys	Gly	Gly	Gly 395	Ile	Gln	Ser	Arg	Ala 400
172 173	Val	Ser	Cys	Val	Glu 405	Glu	Asp	Ile	Gln	Gly 410	His	Val	Thr	Ser	Val 415	Glu
174 175	Glu	Trp	Lys	Cys 420	Met	Tyr	Thr	Pro	Lys 425	Met	Pro	Ile	Ala	Gln 430	Pro	Cys
176 177	Asn	Ile	Phe 435	Asp	Cys	Pro	Lys	Trp 440	Leu	Ala	Gln	Glu	Trp 445	Ser	Pro	Cys
178 179	Thr	Val 450	Thr	Cys	Gly	Gln	Gly 455	Leu	Arg	Tyr	Arg	Val 460	Val	Leu	Cys	Ile
	Asp 465	His	Arg	Gly	Met	His 470	Thr	Gly	Gly	Cys	Ser 475	Pro	Lys	Thr	Lys	Pro 480
182 183	His	Ile	Lys	Glu	Glu 485	Cys	Ile	Val	Pro	Thr 490	Pro	Cys	Tyr	Lys	Pro 495	
184 185	Glu	Lys	Leu	Pro 500	Val	Glu	Ala	Lys	Leu 505	Pro	Trp	Phe	Lys	Gln 510	Ala	Gln
187			515	Glu	_			520	•				525			
189		530	_	Ser			535					540				
191	545			Arg	_	550					555					560
193	-			Ile	565					570					575	
195				Ala 580					585					590		
197	-		595	Asp	_			600	_			_	605	_		
199		610		Glu	.,		615					620				
201	625	-		Gln		630					635					640
202	Glu	Pro	Ala	Glu	Glu	Asn	Leu	Cys	Val	Thr	Ser	Arg	Arg	Pro	Pro	Gln

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203					645					650					655	
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205				660	- 1			•	665	•			,	670		
	Glv	Lvs	Trp		Pro	Cvs	Ser	Leu	Thr	Cvs	Glv	Val	Glv	Leu	Gln	Thr
207	1	-1-	675			-1-		680		-1-	1		685			
	Ara	Asn		Phe	Cvs	Ser	His		Leu	Ser	Ara	Glu		Asn	Glu	Thr
209	**** 9	690	141	1 110	CID	DCI	695	200	Dea	001	*** 9	700	1100	11011	014	
	Va 1		T.eu	Δla	Δen	Glu		Cvs	Arg	Gln	Pro		Pro	Ser	Thr	Va 1
	705	110	пси	niu	nsp	710	пси	Cys	nrg	0111	715	Lys	110	JCI	1111	720
		λl =	Cve	λen	λνα		λen	Cve	Pro	Dro		Trn	ጥላፖዮ	Dro	λla	
213	GIII	Ата	Cys	ASII	725	FILE	ASII	Cys	FIU	730	ліц	115	1 7 1	LIO	735	GIII
	T rr	Cln	Dro	Ctro		λνα	Thr	Cvc	Gly		C117	Wa I	Cln	Lvc		Clu
	пр	GIII	PIO	740	ser	AIG	1111	Cys	745	СТА	GIY	Val	GIII	750	AIG	GIU
215	3701	T 0	0		C1 n	7 ~~	Wot	7 l a		C1	Con	Dho	T 011		Tou	Dwo
	Val	Leu	755	ьуѕ	GIII	Arg	Met	760	Asp	СТУ	ser	Pile	765	GIU	Leu	PIO
217	C1	mh w		0	Com	7 l n	Com		Dwo	77-	Crra	C1 n		71-	0	T
	GIU		Pne	Cys	ser	Ата		гàг	Pro	Ala	Cys		GIII	Ald	Cys	ьуѕ
219	T	770		G	D	a	775		*	.	a	780	m	m1	a 1	G
	_	Asp	Asp	Cys	Pro		GIU	Trp	Leu	Leu		Asp	ттр	Thr	GIU	
	785	-1	_	_		790	~1	-1	-1	-1	795		- 1			800
	Ser	Thr	ser	Cys		GIU	СТĀ	Thr	Gln		Arg	ser	Ата	тте		Arg
223	_		_	_	805		_			810	-	_	_		815	_
	Lys	Met	Leu		Thr	GLY	Leu	Ser	Thr	Val	Val	Asn	Ser		Leu	Cys
225				820					825					830		
	Pro	Pro		Pro	Phe	Ser	Ser		Ile	Arg	Pro'	Cys		Leu	Ala	Thr
227		_	835		_			840					845		_	_
	_		Arg	Pro	Gly	Arg		Ser	Thr	Lys	His		Pro	His	Ile	Ala
229		850			_		855	_				860				
		Ala	Arg	Lys	Val		Ile	Gln	Thr	Arg		Gln	Arg	Lys	Leu	
	865					870	_				875			_	_	880
	Phe	Val	Val	Gly	_	Phe	Ala	Tyr	Leu		Pro	Lys	Thr	Ala		Val
233			•	**	885					890			_		895	_
	Leu	Arg	Cys		Ala	Arg	Arg	Val	Arg	Lys	Pro	Leu	Ile		Trp	Glu
235				900					905					910		
	Lys	Asp	_	Gln	His	Leu	Ile		Ser	Thr	His	Val	Thr	Val	Ala	Pro
237			915					920					925			
238	Phe	_	Tyr	Leu	Lys	Ile		Arg	Leu	Lys	Pro		Asp	Ala	Gly	Val
239		930					935					940				
240	Tyr	Thr	Cys	Ser	Ala	Gly	Pro	Ala	Arg	Glu	His	Phe	Val	Ile	Lys	Leu
241	945					950					955					960
242	Ile	Gly	Gly	Asn	Arg	Lys	Leu	Val	Ala	Arg	Pro	Leu	Ser	Pro	Arg	Ser
243					965					970					975	
244	Glu	Glu	Glu	Val	Leu	Ala	Gly	Arg	Lys	Gly	Gly	Pro	Lys	Glu	Ala	Leu
245				980					985					990		
246	Gln	Thr	His	Lys	His	Gln	Asn	Gly	Ile	Phe	Ser	Asn	Gly	Ser	Lys	Ala
247			995					1000					1005		-	
	Glu	Lys	Arg	Gly	Leu	Ala	Ala		Pro	Gly	Ser	Arg	Tyr	Asp	Asp	Leu
249		1010					1015			•		1020		-	-	
	Val			Leu	Leu	Glu			Gly	Trp	Pro	Gly	Glu	Leu	Leu	Ala
	1025		_			1030		-		-	1035					1040
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L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date